

Title (en)

Shared block comparison architecture for image registration and video coding

Title (de)

Gemeinsame Blockvergleichsarchitektur zur Bildaufzeichnung und Videoverschlüsselung

Title (fr)

Architecture de comparaison de bloc partagé pour l'enregistrement d'image et le codage vidéo

Publication

EP 2091255 B1 20111026 (EN)

Application

EP 08006422 A 20080331

Priority

US 3082008 A 20080213

Abstract (en)

[origin: EP2091255A1] This disclosure describes an efficient architecture for an imaging device that supports image registration for still images and video coding of a video sequence. For image registration, the described architecture uses block-based comparisons of image blocks of a captured image relative to blocks of another reference image to support image registration on a block-by-block basis. For video coding, the described architecture uses block-based comparisons, e.g., to support for motion estimation and motion compensation. According to this disclosure, a common block comparison engine is used on a shared basis for both block-based image registration and block-based video coding. In this way, a hardware unit designed for block-based comparisons may be implemented so as to work in both the image registration process for still images and the video coding process for coding a video sequence.

IPC 8 full level

H04N 7/26 (2006.01); **G06T 5/50** (2006.01); **H04N 7/36** (2006.01)

CPC (source: EP US)

G06T 7/30 (2017.01 - EP US); **H04N 19/51** (2014.11 - EP US); **H04N 19/537** (2014.11 - EP US); **H04N 23/68** (2023.01 - EP US);
H04N 23/6845 (2023.01 - EP US); **H04N 23/741** (2023.01 - EP US); **H04N 23/745** (2023.01 - EP US); **G06T 2207/10016** (2013.01 - EP US);
G06T 2207/20021 (2013.01 - EP US); **H04N 19/43** (2014.11 - EP US); **H04N 19/85** (2014.11 - EP US)

Citation (examination)

- US 6075905 A 20000613 - HERMAN JOSHUA RANDY [US], et al
- US 2007172151 A1 20070726 - GENNETTEN K D [US], et al

Cited by

EP2717012A4; US8478076B2; WO2013062743A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2091255 A1 20090819; EP 2091255 B1 20111026; AT E531201 T1 20111115; CN 101911701 A 20101208; CN 101911701 B 20130327;
JP 2011512111 A 20110414; JP 2013258725 A 20131226; KR 101215045 B1 20121224; KR 20100116211 A 20101029;
TW 200948086 A 20091116; US 2009202176 A1 20090813; US 8098957 B2 20120117; WO 2009102897 A1 20090820

DOCDB simple family (application)

EP 08006422 A 20080331; AT 08006422 T 20080331; CN 200980101498 A 20090212; JP 2010546902 A 20090212;
JP 2013150982 A 20130719; KR 20107020476 A 20090212; TW 98104729 A 20090213; US 2009033966 W 20090212; US 3082008 A 20080213